### **Epsilon Engineering, Inc.**

July 31, 2003

Mr. Mark Smith, P.E. Director of Public Works City of College Station Public Works Department P.O. Box 9960 College Station, TX 77842

RE: Greens Prairie Road / Arrington Road / SH 40 Intersection Improvement Project

Dear Mr. Smith:

Enclosed are the proposed scope of services (Exhibit "A"), fee proposal (Attachment "A"), alignment (Exhibit "B"), and Time of Performance (Article III) for the Greens Prairie Road / Arrington Road / SH 40 Intersection Improvements Project. We understand that this will be an extension of our current contract with the City for the Greens Prairie Road Widening Project (Project No. ST0214).

The proposed roadway design agreed upon by the City Transportation Committee and the Developer, Crowley Development Company, will include four lanes and a right turn lane on Arrington Road at SH 40 with curbs, gutters, and underground storm drains. The proposed Greens Prairie Road design will also be four lanes with curbs, gutters, and underground storm drains at its intersection with Arrington Road tapering to two lanes without shoulders at its tie in to the existing Greens Prairie Road to the west (see Exhibit "B"). Illumination and water line relocations / encasement are also included.

We will prepare the Plans, Specifications, and Estimates (PS&E) package for the proposed route that extends approximately 2,000 feet. In addition to meeting the requirements of the City of College Station, we will also be coordinating our work with TxDOT to ensure that the design ties in smoothly to the SH 40 frontage road and meets their expectations. We have also acquired the "as-built" drawings of the Wellborn Special Utility District's 16" diameter and 2 ½" diameter lines located outside the right of way in a 15 foot wide easement that parallels and extends perpendicular to the south right of way line of the existing Greens Prairie Road alignment. Other utility relocations will be coordinated with the providers and in conjunction with relocation plans by TxDOT for SH 40.

We are currently developing the right of way requirements for this new location and preparing, through Strong Surveying, the right of way acquisition map and metes and bounds descriptions for the acquisition of three parcels under a separate contract with Crowley Development Company. The fee proposal of October 31, 2002 was adjusted accordingly to exclude work currently under contract and reflects the effort needed to develop the plans for the new alignment. However, additional topographic survey and deed research is

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necessary for the new alignment and the fee proposal includes \$6,000 for Strong Surveying to perform the topographic survey, the deed research, the utility locates, and some brush clearing for the cross section extensions.

We have also included identification of subsurface utilities ("potholing") to be performed by TexCon at a rate of \$300 per hole with our surveyor, Strong Surveying, measuring the depth of the gas, fiber optics, water, and cable lines.

CSC Engineering and Environmental will be developing the Phase I environmental site assessment, extracting / analyzing approximately 8 to 10 cores along the project route, and developing the recommended pavement design. Their cost of \$10,900 includes these services along with approximately \$900 to clear a route for the drilling rig. We will coordinate the brush clearing with CSC and Strong to ensure that an efficient clearing pattern is developed that meets both firms' needs and minimizes cost to the City.

We have organized the format of the proposal to the general categories of Site Condition Determination, Contract Document Preparation, and Construction Assistance, similar to Project No. ST0214. We would like to continue the invoicing structure as established on Project No. ST0214, which is on a lump sum fee by phase with progress payments by percent phase complete.

We are excited to have this opportunity to work with you on this very important project and will be available to meet with you to discuss this project in more detail at your convenience. If you have any questions, please contact me anytime.

Sincerely,

Epsilon Engineering, Income

By Michael A. Martin, P.E.

Office Director

cc: A.J. Widacki, P.E.

Attachments: Scope of Services, Alignment, Schedule, and Fee Proposal

# EXHIBIT "A" GREENS PRAIRIE ROAD / ARRINGTON ROAD / SH 40 INTERSECTION IMPROVEMENT PROJECT

#### **SCOPE OF SERVICES**

The following engineering tasks will be performed by the Consultant:

#### Site Condition Determination

- Meet with the City of College Station staff to discuss project goals, schedule, budget, and deliverables. Continue coordination to ensure the staff is well-informed on the progress and issues of the project.
- Meet with TxDOT (Bryan District) staff to confirm TxDOT's requirements and expectations for the roadway intersection.
- Gather and review all available information, including existing roadway construction plans, geotechnical, environmental, and drainage studies, right of way maps, utility layouts, future development plans, and other available information.
- Topographic survey at 50 foot intervals from within the existing Greens Prairie Road Right of Way to 25 feet outside the proposed right of way at the Greens Prairie Road / Arrington Road intersection and at the western end of the project.
- Subsurface utility identification ("potholing") of utility lines.
- Utility location research, coordination, and field survey.
- Coring, geotechnical analysis, and pavement design.
- Phase I Environmental Site Assessment.
- Analysis of the above items.

#### **Contract Document Preparation**

- Based on the approved alignment, prepare 11"x17" construction plans, specifications, estimates, and other contract documents for the roadway at a scale of 1"=40' or other approved scale, including:
  - Horizontal and Vertical Alignments
  - Typical Sections
  - Design Cross Sections
  - Traffic Control Plans and SW3P
  - Roadway Plan & Profile Sheets
  - Signs / Pavement Markings
  - Miscellaneous Roadway Details and Intersection Layouts
  - Hydrology and Hydraulic Analysis and Drainage Area Maps
  - Storm Drain System P&P Sheets and Culvert Layouts
  - Illumination Layouts and Details
  - Standards, General Notes, Specifications, and Quantity Sheets

- Prepare 11"x17" construction plans, specifications, estimates, and other contract documents for the water line relocations / encasement at a scale of 1"=40' or other approved scale, including:
  - Plan and Profile sheets
  - Details
  - Standards, General Notes, Specifications, and Quantity Sheets
- Review the design plans with the City and TxDOT at the 60% and 90% milestones.
- Attend public meetings required during the design process.
- Prepare 15 sets of final design plans, specifications, estimates, bidding, and contract documents that meet City and TxDOT design requirements.
- Prepare and pursue approval of necessary permits, including NPDES SW3P / Notice of Intent, TxDOT right of way construction permit, and Section 404 permit.

#### **Construction Assistance**

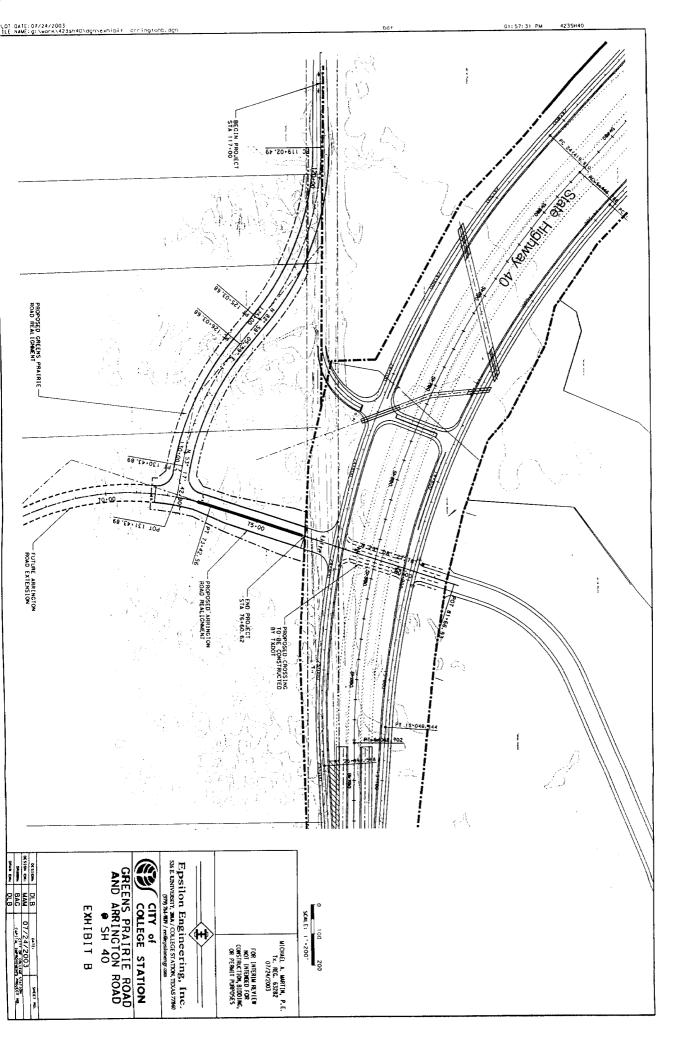
- Assist the City during the bidding phase of the project.
- Attend required meetings, including the pre-bid and pre-construction meetings.
- Review bids and recommend award of construction contract.
- Clarification of plans, specifications, and bid documents.
- Assess materials test results.
- Review shop drawings and other submittals.
- Review contractor pay estimates for conformance with contract documents and prepare recommendation for payment by the City.
- Prepare / review change order requests with recommendations to the City.
- Provide periodic inspections to ensure general compliance with contract documents.
- Attend final inspection and project closure activities.
- Prepare "as-built" drawings and final completion certification.

## Attachment "A" City of College Station, Texas Greens Prairie Road / Arrington Road / SH 40 Intersection Improvement Project

#### Design Fee Estimate

Design Consultant Labor Hour Estimate

Project:	414.3	Project	Project	Engineer	CADD	Admin.	Subtotal	Estimated	Hours /
Design Consult		Manager	Engineer	In-Training	Operator	Support	(manhrs)	Sheets	Sheet
Epsilon Engine	July 31, 2003	Manager	Linginico		-		· · · · 1		
Date:	July 31, 2003								
Site Condition	Determination - Subconsultants	ŀ		i		i			
1	Topographic / Utility Survey	0	0	0	0	0	\$5,800.00		
2	ROW Research	0	0 1	0	0	0	\$200.00		15 holes max
3	Utility "Potholing"	0	0	0	0	0	\$4,500.00 \$4,000.00		13 fibles max
	Phase I Environmental Site Assessment	0	0	0	0	0	\$6,900.00		
5	Coring / Geotech Evaluation and	0	0	0	u	۰	\$6,900.00		
	Pavement Design			l		H	\$21,400.00		
	Subcontractor Total	ļ				H	Ψ21,400.00		
		1	1						
:: D.C. º F.D	aration - Epsilon Engineering					ļ			
1	Review and Adjust Topographic Survey	1	3	4	0	0	8		
2	As-Built Plans File Review / Incorporation	1	4	4	6	0	15		
3	Coring / Geotech / Pavement Design Eval	1	3	4	1	0	9		
4	Cover Sheet	1	2	4	8	0	15	1	15
5	Index Sheet	1	2	6	8	0	17	1	17
6	Horizontal Alignment Sheet	2	2	4	6	0	14	1	14
7	General Notes	2	6	4	4	0	16	1	16
8	Typical Sections	4	6	16	16	0	42	3	14
9	Roadway Plan & Profile Sheets / SW3P	16	24	40	40	0	120	6	20
10	SW3P BMP Summary	2	4	8	8	0	22	1	22
11	Design Cross Sections	2	24	16	4	0	46	7	21
12	Traffic Control Plan / Seq. of Constr.	24	24	56	40	0	144	1	29
13	Traffic Control Typica. Sections	3	6	8	12	0 .	29 78	1 6	13
14	Signs / Pavement Markings	6	12	24	36	0	78 38	. 4	10
15	Roadway, Median, & Driveway Details	4	6	12	16	. 0	72	7	"
16	Hydrology and Hydraulic Analysis	8	24	40	0	5	44	2	22
17	Drainage Area Map and Calc. Sheets	4	8	16 48	16 64	5	168	9	19
18	Storm Drain Lateral and P&P Sheets	16	40	24	32	0	80	4	20
19	Culvert Layouts	8	16	6	12	ő	24	1	24
20	Storm Drain System Details	2	4	12	16	ő	34	2	17
21	Intersection Layout Details	2 8	16	24	40	0	88	8	11
22	Illumination Layouts, Details, & Summary	3	6	16	24	ő	49	2	25
23	Water Line Relocation P&P Sheets	2	6	8	16	ő	32	2	16
24	Water Line Details	2	4	6	6	ő	18	1	18
25	Water Line Relocation Summary Sheet	8	16	32	40	ő	96	7	14
26	Roadway Quantity Summary Sheets Standards	4	10	12	16	0	42	45	1
27 28	Construction Cost Estimate	4	12	24	o	o l	40		
28 29	Specifications	4	12	8	ő	o l	24		
30	Permit Preparation / Review	Ö	0	ō	0	0	0		
31	Review / Coordination Meetings	16	16	l o	0	0	32		
32	Bidding Documents	8	12	16	8	8	52		
	Subtotal	169	334	502	495	8	1,508	115	13
0.000	Rate (Incl. Salary OH & Profit)	115.00	93.00	74.00	55.00	48.00			
	PS&E Preparation Total	19,435.00	31,062.00	37,148.00	27,225.00	384.00	\$115,254.00		
::									
	Assistance - Epsilon Engineering	10	12	0	0	2	26		
1	Pre-bid, Pre-Con Meetings	12	4	0	0	1	7		
2 3	Review / Rec. for Award of Bidder Field Reviews of Construction	2 14	16	0	0	Ö	30		
4	Review of Submittals, Tests, C/Os, etc.	7	12	0	ő	ő	19		
11		8	16	ő	Ö	ő	24		
5 6	Review of Progress Payments Clarification of Bidding Documents	4	8	Ö	Ō	Ō	12		
7	As-Built Drawings	4	12	16	24	2	58		
100	Subtotal	51	80	16	24	5	176		
0.000.000000	Rate (Incl. Salary OH & Profit)	115.00			55.00	48.00		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Labor Total	5,865.00			1,320.00	240.00	\$16,049.00		
Construction	Assistance - Subconsultants	1		1	·	1		1	1
1	Identify Control Points	0	0	0	0	С	\$750.00		
1	Subcontractor Total					[	\$750.00	4	1
	Total Construction Assistance		l			l .	\$16,799.00		1
						1	1		
	us - Epsilon Engineering	_	1			0	\$1,500.00		
1	Printing Costs	0	0	0	0	0	\$1,500.00	1	1
2	Travel (Mileage)	0	"	"	"	,	\$1,750.00	1	1
	Total Miscellaneous						\$1,750.00	1	
						1		1	1
	TOTAL PROJECT HOURS	220	414	518	519	13	1,684	115	15
7.00	TOTAL PROJECT COST	\$25,300.00	\$38,502.00	\$38,332.00	\$28,545.00	\$624.00	\$155,203.00		
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### ARTICLE III TIME OF PERFORMANCE

Project: <u>Greens Prairie Road</u> Project	Arrington Roa	<u>id / SH 40 Ir</u>	tersection Improvement	
Engineering Firm: Epsilon	Engineering, I	nc.		
SITE CONDITION DETERMINATI	ON PHASE:			
Beginning Date:	August 21, 2	003		
Survey/Environ/Geotech Completion Date:	October 21, 2	2003		
Calendar Days Used:	60	<u>Days</u>	Days	
CITY Review & Approval of Environ/Geotech Reports:	21	<u>Days</u>	Days	
CONTRACT DOCUMENT PREPA	RATION PHAS	E:		
Beginning Date:	Date: September 21, 2003			
60% Completion:	December 19,	2003		
Calendar Days Used:	90	Days	Days	
Interim CITY Review & Approval:	28	<u>Days</u>	Days	
90% Plans Begin:	January 19, 20	004		
90% Completion:	March 19, 2004			
Calendar Days Used:	60	Days	Days	
CITY Review & Approval:	21	<u>Days</u>	Days	
CONSTRUCTION BIDDING / AW	ARD PHASE:	12 Wee	ks	
CONSTRUCTION PHASE:				
Begin Construction:	July 15, 200	)4		
Project Construction:	150 - <u>18</u>	0 Days	Days	
Project Closeout:	30	<u>Days</u>	Days	
	EPSILON ENGI BY: Office Dire	ector	No.	
	Official Ti	itie		